



Norman H. Bangerter
Governor
Kenneth L. Alkema
Executive Director
Don A. Ostler, P.E.
Director

State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY

288 North 1460 West
P.O. Box 144870
Salt Lake City, Utah 84114-4870
(801) 538-6146
(801) 538-6016 Fax

DOGM
MINERALS PROGRAM
FILE COPY

RECEIVED

JUN 08 1992

DIVISION OF
OIL GAS & MINING

June 5, 1992

Mr. Frank Wicks
Vice President & General Manager
Barrick Mercur Gold Mines
Tooele, Utah 84074

RE: Construction Permit Reservation Canyon
Tailing Impoundment: 1992 Expansion

Dear Mr. Wicks:

We have completed our review of the plans and specifications for the expansion of the Reservation Canyon Tailings Impoundment at Barrick Mercur Gold Mine in Tooele County, prepared by your engineering department, and submitted to us on May 7, 1992.

The plans and specifications as submitted, comply with the *Utah Water Quality Rules*, (R317, *Utah Administrative Code*). A **Construction Permit** is hereby issued as constituted by this letter, subject to the following conditions:

1. Any revisions or modifications to the approved plans and specifications must be submitted to the Division of Water Quality (the Division) for review and approval, before construction or implementation thereof.
2. The approved facilities must not be placed in service unless the Division has made a final inspection, and has authorized in writing to place the constructed facilities in service.
3. During construction of the bentonite-enriched clay liner, triaxial permeability tests shall be run on Shelby tube samples at a rate of a minimum of one sample per every 20,000 square feet of the area of each lift, or part thereof. Corrective measures shall be implemented in consultation with the Division if the samples exceed in-place permeability of 1×10^{-7} centimeter per second for the bentonite-enriched clay liner.

This construction permit will expire on June 5, 1993, unless substantial progress is made in constructing the approved facilities, or the plans and specifications have been resubmitted and the construction permit is reissued. This permit does not relieve you in any way of your obligations to comply with other applicable local requirements, or permits. You may contact Mr. Myron Bateman, Tooele County Health Department at (801) 882-5550 for further assistance in this regard.

Mr. Frank Wicks
Page 2
June 5, 1992

The construction will include: (1) raising the tailings reservoir dikes from the present containment elevation of 7275 feet to a new containment elevation of 7290 feet; (2) raising the Main Buttress and the Levee Buttress by 15 feet each to containment elevations of 7290 feet; and, (3) the extension of the impoundment liner to the 7300 feet elevation. The impoundment liner will be a bentonite enriched clay liner with a minimum of twelve (12) inches in compacted thickness. The liner will cover a surface area of approximately twelve (12) acres on reservoir side slopes of 3:1 as a minimum. The field hydraulic conductivity of the compacted clay liner will be 1×10^{-7} centimeter per second or less. The clay liner will be protected from erosion by using a woven geotextile, AMOCO 2006 or equivalent. The construction will be as shown on Drawings Nos. 6.92.2 to 6.92.9 and 6.92.11 to 6.92.14 all dated May 5, 1992, and the construction specifications, as approved on June 5, 1992 by the Utah Water Quality Board.

During the construction, the construction quality assurance testing by a third party independent contractor, inspections, and the reporting will be performed as per the requirements of the approved construction specifications and the document entitled, "Inspection and Quality Assurance (QA) Specification" as approved by the Division.

A set of approved plans, specifications, and the QA document are returned herewith bearing an imprint of our construction permit stamp. The stamped set must be kept available for examination and inspections to be conducted by the Division, or for resolution of any conflicts or discrepancies that may arise during construction or installation.

Please advise us of the beginning of construction. This will enable us to schedule periodic inspections. We request that a copy of record drawings be provided after the final inspection has been conducted by the Division, and completed works have been placed in service. This will enable us to keep our information accurate.

If we can be of further assistance, please contact Mr. C.C. Patel, P.E. of my staff.

Sincerely,

Utah Water Quality Board



Don A. Ostler, P.E.
Executive Secretary

Enclosure

DAO:ccp:rvg

cc: Tooele County Health Department, Myron Bateman
Office of the Attorney General, Fred Nelson
Division of Oil, Gas & Mining, Wayne Hedberg
Division of Water Resources, Richard Hall